Comments on "Ranking researchers: Evidence from Indonesia" by Fry et al. (2023)

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Abstract

The authors express gratitude to Fry et al. (2023) for their contribution to the research assessment situation in Indonesia, which highlights technical issues regarding the controversial SINTA Platform, positive feedback on efforts made, and the importance of data sharing for scientific development. However, the authors want to clarify some points to avoid potential misunderstandings for international readers, particularly those from low- and middle-income countries.

The authors cited only a limited number of references in their overview of the research ecosystem in Indonesia, which may lead to inaccuracies and oversimplifications.

To provide a more comprehensive understanding, the authors should expand their reference base to include a diverse range of sources. Engaging with diverse stakeholders is crucial to gain a nuanced understanding of the local context and challenges facing researchers in Indonesia.

Prioritizing good research practices that prioritize quality and innovation is more important than relying solely on traditional metrics and rankings, as discussed in the paper. Research funding allocation should be aligned with national development priorities to establish the relevance and significance of research.

Should the authors have had communications with local researchers, then they should get the idea that The SINTA platform serves as a gatekeeper for scholarly works produced by Indonesian researchers.

1. INTRODUCTION

We would like to express our gratitude to (Fry et al., 2023) (‘Ranking researchers: Evidence from Indonesia’, 2023) for their contribution regarding the research assessment situation in Indonesia. Their article highlights three main points:

1. Raising technical issues regarding the controversial SINTA Platform since its launch in 2017.
2. Providing positive feedback on the efforts made and also giving notes on several crucial points, including the SINTA score calculation, through time consuming handpicked data collection.
3. Point out the importance of data sharing for scientific development.

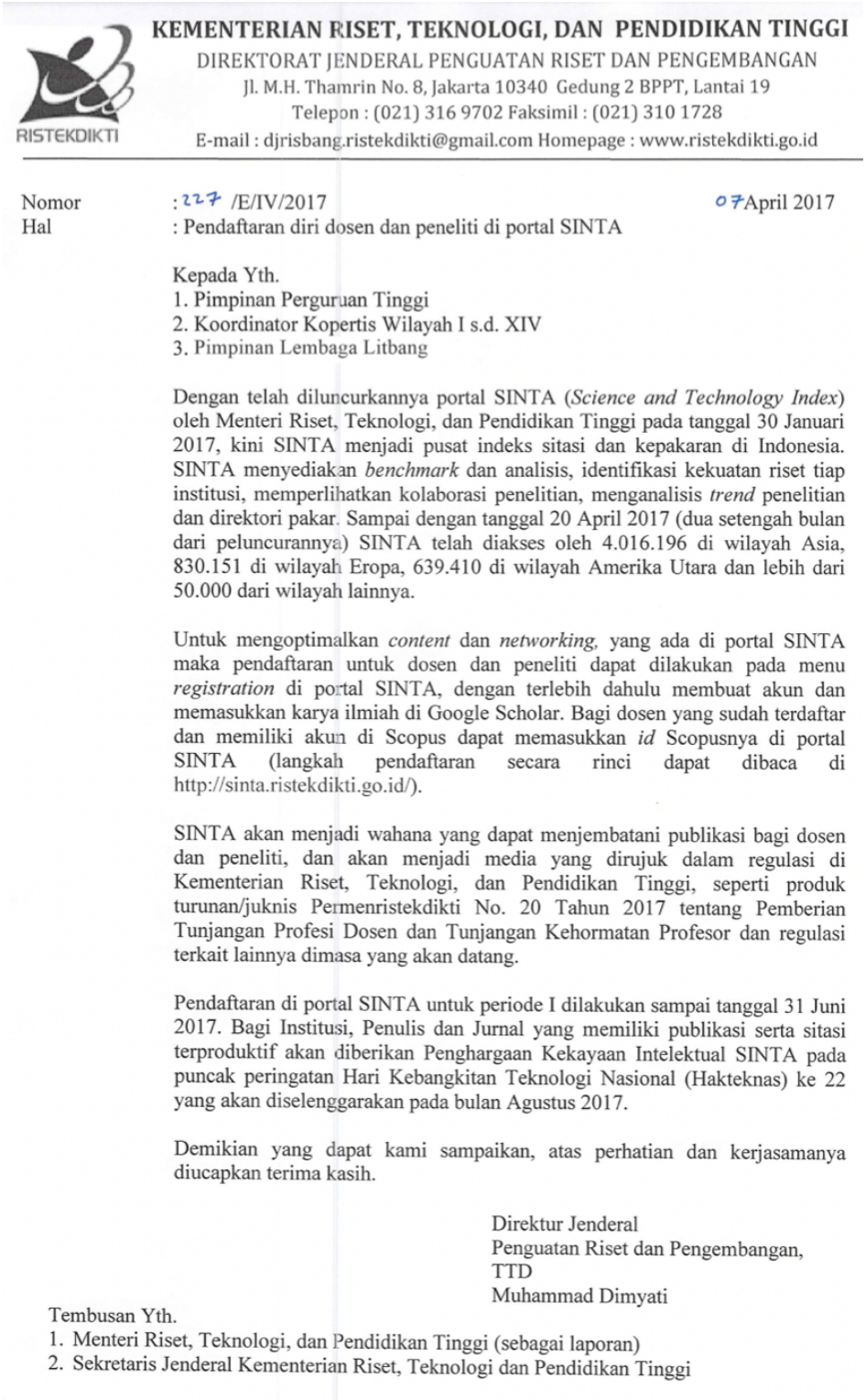
However, we would like to provide clarification to prevent any potential misunderstandings for international readers, particularly those from low- and middle-income countries.

2. SOME AREA OF IMPROVEMENTS

2.1 Regarding the penalties of not signing up to SINTA platform

"We are not aware of any penalties for not signing up, but as of June 2021, over 222,000 accounts have been registered on SINTA, covering (at a minimum) 82 % of Indonesian academics." (Page 3, right column)

Although there were no explicit penalties, in fact, registration was mandatory for all lecturers employed by both private and public universities under the Ministry's jurisdiction. Since early establishment, both ministries which coordinate the operation of higher education in Indonesia (Ministry of Research, Technology, and Higher Education; and Ministry of Religious Affairs), already encouraged (a softened term for mandated) lecturers to register for SINTA accounts. Although the official letter from the Ministry did not explicitly state the requirement (Figure 1), social media messages, particularly in WhatsApp groups, suggested otherwise. Additionally, the Facilitator of publication and academic journal sent out broadcast messages reinforcing the mandatory nature of registration. Evidence of this can be found in an announcement released by Universitas Pamulang, a private university, in January 2020 (Figure 2).



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RISTEKDIKTI

Nomor : 227 /E/IV/2017 07 April 2017
Hal : Pendaftaran diri dosen dan peneliti di portal SINTA

Kepada Yth.
1. Pimpinan Perguruan Tinggi
2. Koordinator Kopertis Wilayah I s.d. XIV
3. Pimpinan Lembaga Litbang

Dengan telah diluncurkannya portal SINTA (*Science and Technology Index*) oleh Menteri Riset, Teknologi, dan Pendidikan Tinggi pada tanggal 30 Januari 2017, kini SINTA menjadi pusat indeks sitasi dan kepakaran di Indonesia. SINTA menyediakan *benchmark* dan analisis, identifikasi kekuatan riset tiap institusi, memperlihatkan kolaborasi penelitian, menganalisis *trend* penelitian dan direktori pakar. Sampai dengan tanggal 20 April 2017 (dua setengah bulan dari peluncurannya) SINTA telah diakses oleh 4.016.196 di wilayah Asia, 830.151 di wilayah Eropa, 639.410 di wilayah Amerika Utara dan lebih dari 50.000 dari wilayah lainnya.

Untuk mengoptimalkan *content* dan *networking,* yang ada di portal SINTA maka pendaftaran untuk dosen dan peneliti dapat dilakukan pada menu *registration* di portal SINTA, dengan terlebih dahulu membuat akun dan memasukkan karya ilmiah di Google Scholar. Bagi dosen yang sudah terdaftar dan memiliki akun di Scopus dapat memasukkan *id* Scopusnya di portal SINTA (langkah pendaftaran secara rinci dapat dibaca di http://sinta.ristekdikti.go.id/).

SINTA akan menjadi wahana yang dapat menjembatani publikasi bagi dosen dan peneliti, dan akan menjadi media yang dirujuk dalam regulasi di Kementerian Riset, Teknologi, dan Pendidikan Tinggi, seperti produk turunan/juknis Permenristekdikti No. 20 Tahun 2017 tentang Pemberian Tunjangan Profesi Dosen dan Tunjangan Kehormatan Profesor dan regulasi terkait lainnya dimasa yang akan datang.

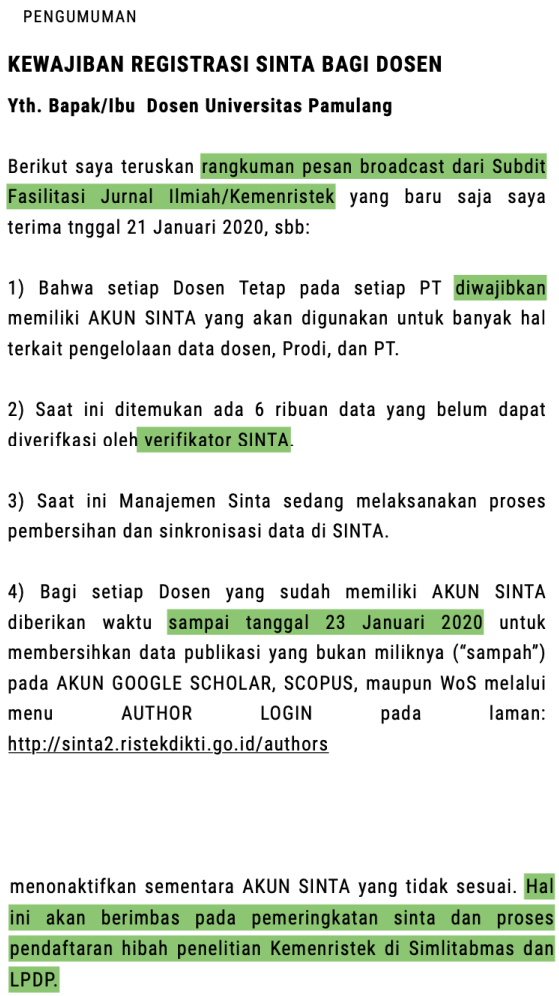
Pendaftaran di portal SINTA untuk periode I dilakukan sampai tanggal 31 Juni 2017. Bagi Institusi, Penulis dan Jurnal yang memiliki publikasi serta sitasi terproduktif akan diberikan Penghargaan Kekayaan Intelektual SINTA pada puncak peringatan Hari Kebangkitan Teknologi Nasional (Hakteknas) ke 22 yang akan diselenggarakan pada bulan Agustus 2017.

Demikian yang dapat kami sampaikan, atas perhatian dan kerjasamanya diucapkan terima kasih.

Direktur Jenderal
Penguatan Riset dan Pengembangan,
TTD
Muhammad Dimyati

Tembusan Yth.
1. Menteri Riset, Teknologi, dan Pendidikan Tinggi (sebagai laporan)
2. Sekretaris Jenderal Kementerian Riset, Teknologi dan Pendidikan Tinggi

Figure 1 An official announcement letter from The Director General of DIKTI urging all lecturers to register for the SINTA Platform, however, the letter did not use the word "mandatory" to describe the registration requirement (LLDIKTI Wilayah III, 2017).



PENGUMUMAN

KEWAJIBAN REGISTRASI SINTA BAGI DOSEN

Yth. Bapak/Ibu Dosen Universitas Pamulang

Berikut saya teruskan rangkuman pesan broadcast dari Subdit Fasilitasi Jurnal Ilmiah/Kemenristek yang baru saja saya terima tnggal 21 Januari 2020, sbb:

1) Bahwa setiap Dosen Tetap pada setiap PT diwajibkan memiliki AKUN SINTA yang akan digunakan untuk banyak hal terkait pengelolaan data dosen, Prodi, dan PT.

2) Saat ini ditemukan ada 6 ribuan data yang belum dapat diverifkasi oleh verifikator SINTA.

3) Saat ini Manajemen Sinta sedang melaksanakan proses pembersihan dan sinkronisasi data di SINTA.

4) Bagi setiap Dosen yang sudah memiliki AKUN SINTA diberikan waktu sampai tanggal 23 Januari 2020 untuk membersihkan data publikasi yang bukan miliknya ("sampah") pada AKUN GOOGLE SCHOLAR, SCOPUS, maupun WoS melalui menu AUTHOR LOGIN pada laman: http://sinta2.ristekdikti.go.id/authors

menonaktifkan sementara AKUN SINTA yang tidak sesuai. Hal ini akan berimbas pada pemeringkatan sinta dan proses pendaftaran hibah penelitian Kemenristek di Simlitabmas dan LPDP.

Figure 2 The summary of a Whatsapp broadcast from the Subdirectorate General of DIKTI, it is revealed that the word "mandatory" (wajib in Indonesian) was used to describe the registration requirement for the SINTA Platform (Ketua LPPM Universitas Pamulang, 2020).

The mandatory registration with SINTA grants the Ministry the authority to link it with various applications, although the process is not time-consuming, Indonesian researchers are compelled to use this exclusive database due to its limited connectivity to external closed databases like Scopus, Web of Science, and ISBN (Figure 3). While this measure may aid administrators in assessing performance, it may lead to a reduction in scholarly diversity. Scopus and Web of Science, being the two largest scientific databases, are primarily English-language articles, thus making them not truly global databases (Tennant, 2020). Given that

Indonesia's primary language is not English, numerous valuable scientific works may be missing from these databases and thus, excluded from the evaluation system.

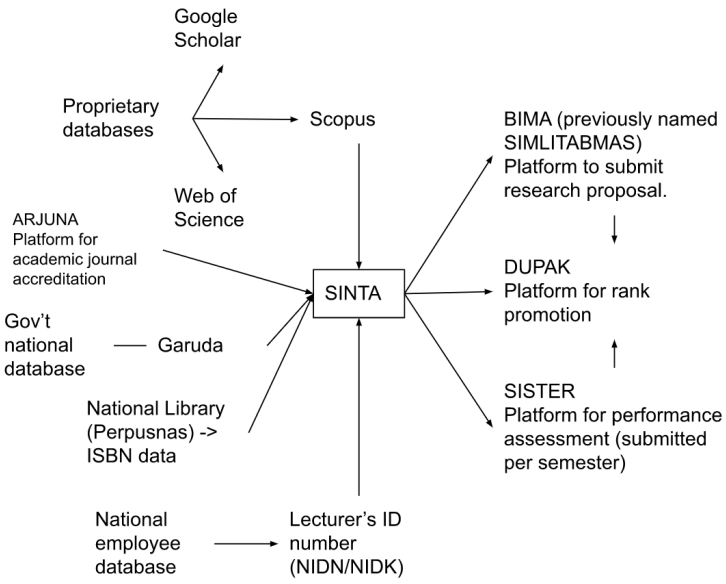


Figure 3 The least links between platforms in Indonesia higher education researcher/lecturer ecosystem. It is mandatory for researchers/lecturers to fill in their SINTA-ID in all platforms on the right hand side (provided by Dasapta Erwin Irawan, CC0).

2.2 Need a more comprehensive discussions in the impact of SINTA platform or other ranking-maker platforms

2.2.1 Metric vs new knowledge production

> Despite this advancement in our understanding of the impact of incorporating metrics to evaluate researchers, much less is known about whether these kinds of incentive systems actually achieve their goal of expanding the production of new knowledge. Such issues may be particularly important for low- and middle-income countries, where researchers face limited resources and conflicting demands on their time. (page 2, left column)

This paper offers a surface-level evaluation of the SINTA system and does not root around into its technical and intricate impacts. While the paper briefly touches upon issues such as

"gaming the system," it fails to acknowledge the system's role in distorting research and higher education policies in Indonesia by disregarding the importance of enhancing research infrastructure and nurturing academic/research culture (Figure 4).

The authors have not mentioned the implications of the SINTA platform to university level management. The implementation of SINTA has resulted in a significant shift in the way universities evaluate their staff's performance. The mandatory use of SINTA has compelled the entire institution to reorganize its workforce, including the creation of a SINTA Verificator Team at the Campus Level (Ditjen Dikti and Universitas Mercu Buana, 2018) (Figure 5). This is because the publication and citation data provided by SINTA play a crucial role in determining universities' annual rankings in Indonesia, which are evaluated based on various tridharma parameters, such as education, research, and community service (Handini, 2022).

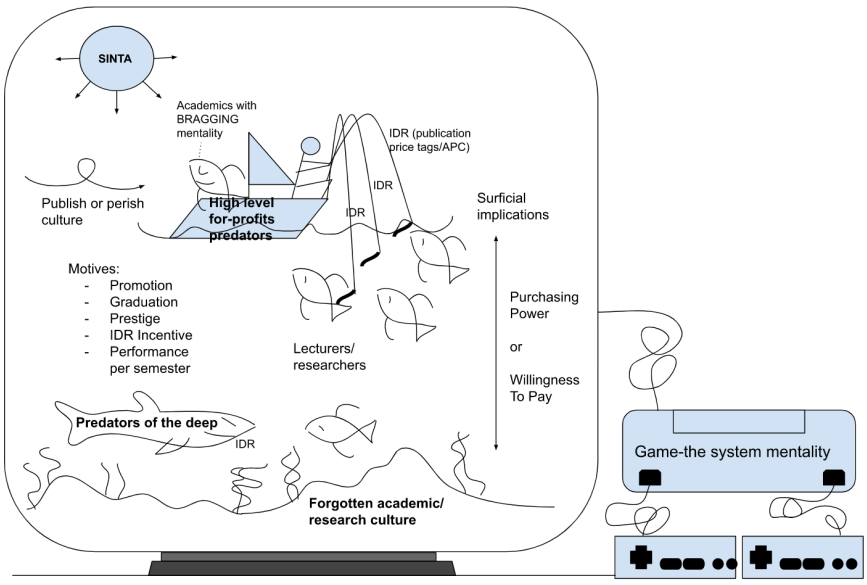


Figure 4 Surficial vs deep-rooted implications of SINTA and other similar policies (provide by Dasapta Erwin Irawan, CC0).

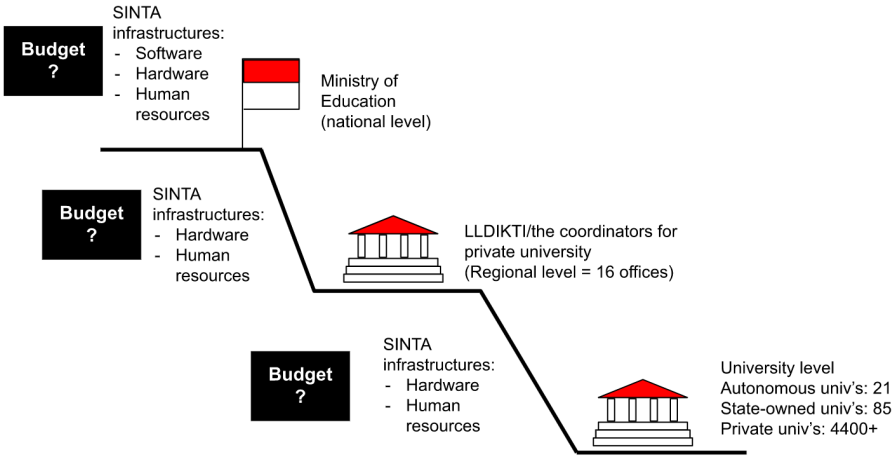


Figure 5 The management aspect of SINTA platform (Data source: PDDIKTI website, https://pddikti.kemdikbud.go.id/) (provided by Dasapta Erwin Irawan, CC0).

2.2.2 The dependency of higher education to commercial services

> We show that, after 2016, Indonesia exhibits a sharp increase in researcher publication output, and Indonesian institutions rise in global rankings that rely on Scopus indexed publications—a trend unrivaled by neighboring Southeast Asian countries. (page 2, left column)

In Indonesia, most of the research funding for higher education institutions comes from the government. However, the amount of funding can often be insufficient to meet the needs of universities and colleges, leading to a lack of resources for research and development, as well as a limited ability to attract and retain talented faculty and students. It is important for these institutions to explore alternative sources of funding and to advocate for increased government support for higher education (Irawan et al., 2021). Similar situations also occur in other Asian countries, such as India (Irawan et al., 2023a). Therefore the high dependency to commercial services, e.g.: database subscriptions, journal subscriptions, and journal article processing charge (APC), are not the best recommendation to low-middle income countries, especially when the motivation is only to increase the number of publications (Alicia J. Kowaltowski, 2023). Such a recommendation could potentially diminish the spirit of openness in Indonesia's research ecosystem (Irawan et al., 2023b). The SINTA platform heavily relies on for-profit services, such as Scopus and Web of Science, to provide a continuous supply of data from paid databases.

In this paper, we examine the introduction of a nation-wide ranking system in Indonesia, a country viewed (internally and externally) as one lagging behind the global knowledge production frontier. (page 9, left column)

The global knowledge production frontier is currently limited to English-written papers, which are further filtered by commercial databases such as Scopus and Web of Science. This process inadvertently reduces the visibility of research from non-English speaking countries like Indonesia, contributing to language barriers that limit the number of published papers. As a result, the selection of papers that are publishable in certain journals becomes dependent on language, leading to disparities in international recognition and acknowledgement.

This language barrier presents a significant challenge for researchers in Indonesia. Writing in a language that is not their mother tongue can lead to difficulty expressing complex ideas and communicating nuances effectively. Researchers may struggle to find the right words or phrases to convey their ideas in English, even if they have a deep understanding of the subject matter. This can result in a lack of confidence in their writing abilities, which can further perpetuate the underrepresentation of their research in international journals.

Furthermore, the pressure to publish in high-impact, English-language journals can lead to a neglect of locally-relevant research (Molas-Gallart and Ràfols, 2018). Researchers may prioritize writing for international audiences over addressing the needs of their local community, resulting in a disconnect between research priorities and the realities of those on the ground.

However, practical and instant efforts are being made to address these challenges. Institutions and organizations are providing English language training and support for researchers to improve their writing skills. Additionally, there is growing recognition of the importance of locally relevant research and the need for diverse perspectives in shaping global knowledge production. By promoting a more inclusive and diverse research ecosystem, we can overcome language barriers and improve the visibility of research from non-English speaking countries like Indonesia.

Despite these efforts, it is important to recognize that Indonesian researchers have the right to express their gained knowledge in their language of choice and be acknowledged on equal footing with researchers from other countries. Language should not be a barrier to the

dissemination of knowledge or to achieving recognition in the international research community.

The advancements in natural language processing and artificial intelligence have certainly made significant strides in bridging the gap between different languages. These technologies can certainly be helpful in improving research communication, it is important to recognize their limitations and the continued importance of promoting multilingualism and inclusivity in research.

2.2.3 The problem with connecting SINTA platform with other platforms in Indonesia research ecosystem

SINTA, which was initially created to serve as a database of articles written by Indonesian researchers (a feature that was previously served by the GARUDA database), has since evolved into (1) ranking database, (2) the basis of staff promotion, and (3) faculty performance assessment per semester (SISTER) (Hendrayana, 2021) (Figure 6).

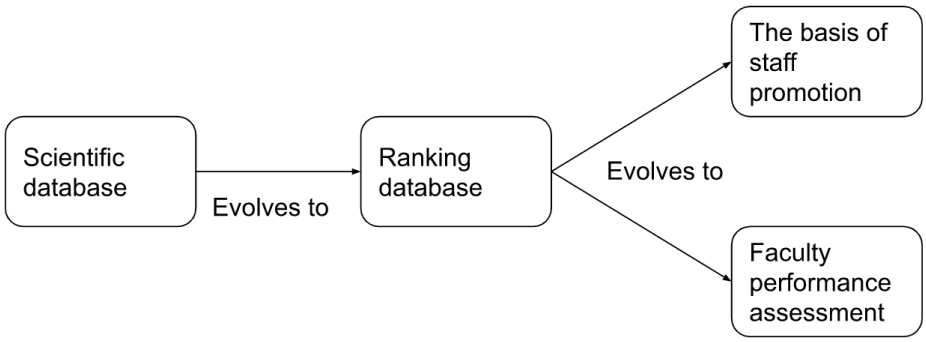


Figure 6 The evolution of SINTA platform from a scientific database to ranking database turns to the basis of staff promotion and faculty performance assessment (Provided by Dasapta Erwin Irawan, CC0).

The use of closed services as the basis of performance assessment can pose several problems, particularly when it comes to research evaluation. Commercial databases such as Scopus and Web of Science, which are widely used to measure research impact and productivity, have

been criticized for their lack of transparency and limitations in capturing the full scope of research output.

One issue is that these databases may not capture research that is not published in English or indexed in their databases, which can result in the underrepresentation of research from non-English speaking countries (including Indonesia) or from disciplines that are not well-represented in these databases. Additionally, the use of proprietary algorithms to calculate metrics such as the impact factor can make it difficult to evaluate the quality and accuracy of the assessments.

Another problem is the potential for conflicts of interest, as these databases are often owned by publishers and may prioritize their own content over other research output. This can lead to a bias towards certain publishers or journals and may result in an incomplete or skewed assessment of research impact.

As the reliance on closed services for research evaluation continues, it is important to critically evaluate their limitations and explore alternative approaches that prioritize transparency, inclusivity, and diversity in research assessment. This includes developing open-access databases, promoting multilingualism in research communication, and utilizing a range of metrics that capture a variety of research outputs beyond traditional journal publications.

It is important to avoid replicating the same shortcomings of closed services in other low-middle income countries without considering their unique contexts and needs. Rather than simply adopting evaluation metrics and practices used in high-income countries, like promoting SINTA platform, it is crucial to take a comprehensive and context-specific approach to research assessment that prioritizes inclusivity, diversity, and equity in each of the low-middle income countries.

In brief, the SINTA platform serves as a gatekeeper for scholarly works created by Indonesian researchers, determining which works should be included in the list and which should be excluded (Figure 7). For example, researchers were unable to include their books without an ISBN or their involvement as editors or peer-reviewers for non-SINTA-accredited journals. Consequently, these works or activities were not recognized as part of the researchers' performance or merit by the associated platforms.

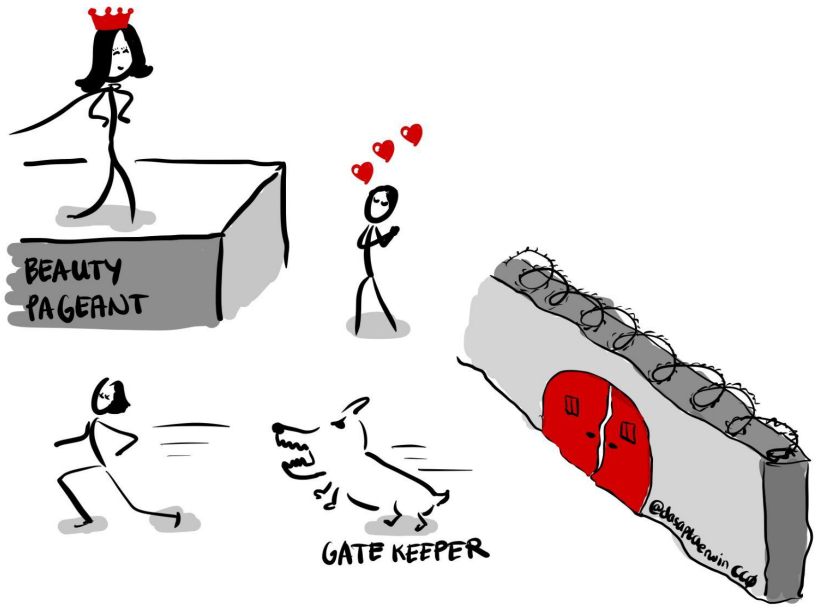


Figure 7 Ranking database as both the beauty pageant and the gatekeeper (provided by Dasapta Erwin Irawan, CC0).

2.3 Stating SINTA platform as a low-cost effort may mislead readers

> Taken as a whole, the potential policy implications of a nationwide scientific ranking system are com- plex. A primary benefit of implementing a ranking system is its potential to influence research effort and priorities at low cost. (page 10, left column)

The authors of the study highlight the benefits of the SINTA system as a "low-cost" solution for increasing the number of national publications in Indonesia through the creation of a

ranking platform. However, while this approach may seem cost-effective compared to investing in infrastructure, it fails to address the underlying issues that impact research quality and impact in the long term. Prioritizing rankings over other factors can hinder the development of a culture of scientific excellence that the Indonesian government seeks to promote and may ultimately limit Indonesia's research reputation on a global scale.

In countries where research funding is limited, like Indonesia and other low-middle income countries, it is essential to prioritize the allocation of funds to research that has a tangible impact on the country's development and meets the needs of its population. By aligning research with national development priorities, researchers can demonstrate the relevance and importance of their work and increase their chances of securing funding and support. Therefore, one cannot simply overgeneralize what's happening in Indonesia and directly compare them without knowing what is happening.

Therefore, it is crucial to tackle these inherent problems head-on, even if it may require more significant investment in infrastructure or other areas. By prioritizing quality and innovation over rankings and publication numbers, Indonesia can enhance its research reputation holistically and reinforce a culture of scientific excellence that extends beyond the SINTA system. Ultimately, this approach will benefit Indonesian researchers and the broader scientific community and contribute to a more robust and inclusive global knowledge production frontier.

Referring to a platform as a "low-cost" solution may be misleading to readers, particularly those from low-middle income countries, as it fails to consider the broader economic, social, and technological contexts in which the platform is being used (Figure 8).

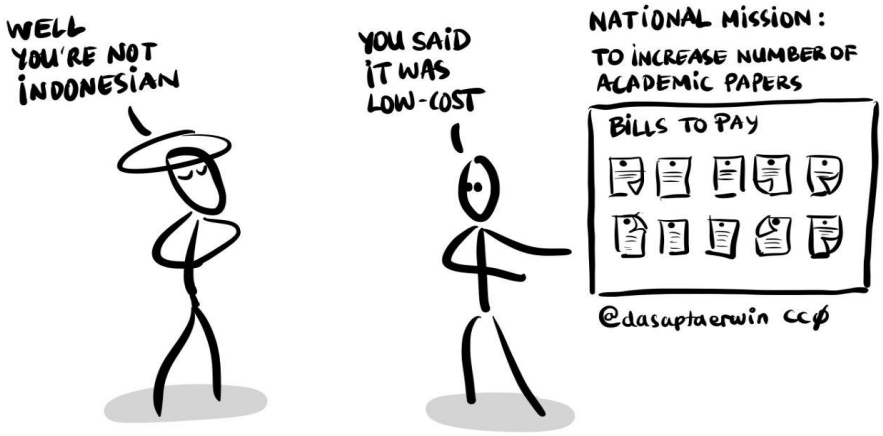


Figure 8 Misleading low-cost recommendation without context (Provided by Dasapta Erwin Irawan, CC0).

2.4 Low-middle income countries need the production of problem-solving knowledge not just production of scientific papers

> Despite this advancement in our understanding of the impact of incorporating metrics to evaluate researchers, much less is known about whether these kinds of incentive systems actually achieve their goal of expanding the production of new knowledge. Such issues may be particularly important for low- and middle-income countries, where researchers face limited resources and conflicting demands on their time. (page 2, left column)

By stating the above sentences, the authors should endorse the idea of counting the number of publications as the sole means to enhance a country's reputation is unwise and fails to account for the many other crucial factors that contribute to a country's research excellence. However, the manuscript discusses more on the positive side of SINTA platform.

Low and middle-income countries encounter numerous pressing issues that demand the creation of real knowledge to provide effective solutions. These countries often confront several challenges such as inadequate healthcare, poverty, limited access to education, unemployment, food insecurity, and insufficient infrastructure (World Bank, 2022). To

address these problems, it is necessary to foster a research culture and generate new knowledge that can help find solutions to these challenges. In particular, research can aid in the identification of effective policies, strategies, and innovations that can help low and middle-income countries overcome their challenges and achieve sustainable development.

Research and innovation can also help to build local expertise and develop the skills and capacities required to tackle these issues effectively (United Nations, 2022). Furthermore, a robust research culture can stimulate economic growth by creating new opportunities for innovation and entrepreneurship. Therefore, it is imperative to prioritize research and innovation in low and middle-income countries to tackle the complex challenges faced by these societies and to promote their sustainable development (United Nations, 2023). To attain these objectives, research should be accompanied by a well-structured roadmap, substantial funding commitments, and continuous efforts for a minimum of three decades. Participating in hit-and-run research with continually changing topics is illogical.

It is essential to acknowledge that every single country faces their own challenge AND limitation with regard to building its research culture (Hannover Research, 2014). However, one needs to also highlight the progress in recent years. There are Indonesian scientists who published high quality research via long standing collaboration and making significant contributions to their respective fields. Saying what the author says about the quality of SINTA publication is the opposite of progress. It does damage to the inspiration and encouragements of Indonesian researchers to pursue research and contribute to the country's development (Figure 9).

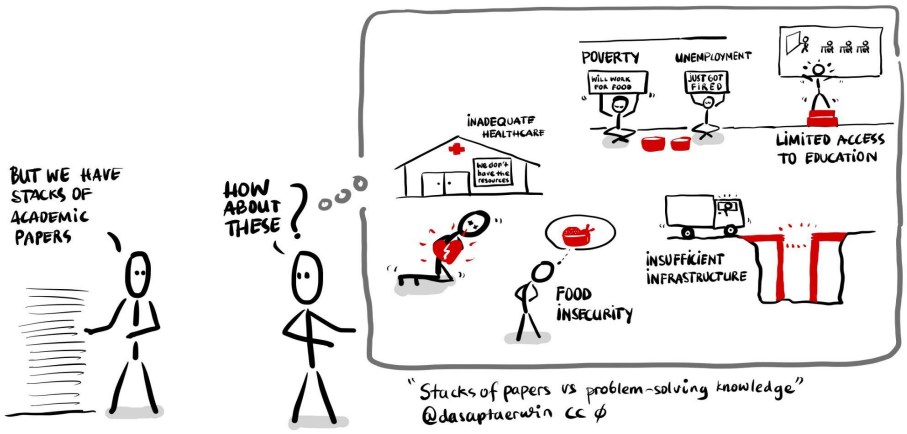


Figure 9 Stacks of academic papers vs problem-solving knowledge production (Provided by Dasapta Erwin Irawan, CC0).

3. REMARKS

1. The authors provide only a brief overview of the research ecosystem in Indonesia, citing only six references, all of which were written by Indonesian researchers. Two of these references are website addresses rather than articles. This limited reference base may lead to the emergence of inaccurate statements or oversimplifications that do not fully capture the complexity of the research landscape in Indonesia. To provide a more comprehensive overview of the research landscape in Indonesia, the authors should consider expanding their reference base to include a more diverse range of sources, including papers written by Indonesian authors in both English and Indonesian. This would help to ensure that the analysis reflects the perspectives and experiences of a broader range of stakeholders and promotes a more inclusive and equitable understanding of the research ecosystem in Indonesia.
2. It is essential to engage with a diverse range of stakeholders, including researchers, policymakers, and other relevant actors, to get a clear snapshot about the implementation of SINTA platform. By actively seeking out and incorporating input from these stakeholders, researchers can gain a more nuanced understanding of the local context and the challenges and opportunities that researchers in Indonesia face.
3. Instead of solely emphasizing traditional metrics as performance indicators, it is crucial for authors to prioritize good research practices that prioritize quality and innovation over the limited metrics and rankings used by platforms such as SINTA.

This includes fostering a culture of scientific excellence that values transparency, rigor, and accountability, and actively engaging with diverse stakeholders to ensure that research is relevant, accessible, and inclusive. By promoting good research practices, we can create a more equitable and sustainable global knowledge production that benefits all researchers and communities, not just those who excel in traditional metrics. This requires a fundamental shift in how we value and promote research, and a commitment to investing in the long-term development of research capacity and infrastructure in low-middle income countries like Indonesia.

4. It is crucial to prioritize research funding allocation in low-middle income countries such as Indonesia, where resources are limited. Research endeavors must address the needs of the population and have a tangible impact on the country's development. By aligning research objectives with national development priorities, researchers can establish the relevance and significance of their work, increasing their likelihood of obtaining funding and support. As such, it is not appropriate to make sweeping generalizations about Indonesia or draw direct comparisons without first understanding the actual situation.
5. The SINTA platform can be compared to both a beauty pageant and a German Shepherd guarding a gate, as it has evolved to serve as a gatekeeper for scholarly works produced by Indonesian researchers. Essentially, the platform determines which works should be included in the list and which should be excluded.

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